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NEW OR OTHERWISE NOTEWORTHY APOCYNACEAE OF TROPICAL AMERICA. III¹

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Peltastes Woodson, gen. nov. Apocynacearum (Echitoideae). Calyx majusculis profunde 5-partitus; lacinae foliaceae plus minusve inaequales margine imbricatae intus basi squamas minutas plus minusve numerosas uniforme gerentes. Corolla speciosissima magna infundibuliformis; tubus inferne latiuscule cylindricus dein circa medium inferiusve staminiger et in fauces aut conicas aut tubulatas aut campanulatas late dilatatus numquam constrictus; limbi lacinae 5 aequales oblique obovatae aestivatione dextrorsum convolutae. Stamina 5 omnino inclusa; antherae inter se adglutinatae et stigmati adplicatae anguste sagittatae dorso superne dense hirsutulae basi angustissime 2-auriculatae dimidia parte superiore ventre pollinigerae, sporangiis binis basi in appendiculas rigidas productis, pollinibus granulosis; filamenta ligulata perbrevia laxe pilosula. Ovarii carpella gemina basi distincta apice in stylo gracili producta, ovulis multis in quoque loculo pluriseriatim superpositis; stigma capitato-fusiforme apice obscure bipartitum. Nectarii glandulae 5 saepissime separatae vel basi paulo connatae. Fructus folliculares apocarpi crassiuscule tereti acuminati plus minusve falcati; semina numerosa fusiforme-subscaphoidea apice latiuscule rostrata ibique bene comosa.—Frutices lactescentes volubiles; folia opposita petiolata rigide membranacea vel coriacea eglandulosa peltata. Inflorescentia lateralis vel rarius subterminalis

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opposita paniculata rariusve subumbellata, bracteis foliaceis oppositis.

Peltastes peltatus (Vell.) Woodson, comb. nov.

Echites peltata Vell. Fl. Flum. 110. 1830; Icon. 3: pl. 32. 1827.

Stipecoma peltata (Vell.) Miers, Apoc. So. Am. 134. 1878.

Peltastes macrocalyx (Muell.-Arg.) Woodson, comb. nov.

Echites macrocalyx Muell.-Arg. in Martius, Fl. Bras. 6¹: 160. 1860.

Stipecoma macrocalyx (Muell.-Arg.) Miers, loc. cit. 136. 1878.

Peltastes malvaeflorus Woodson, sp. nov., suffruticosa volubilis; ramis teretibus sat crassis juventate dense et minute ferrugineo-tomentulosis tandem glabratis cortice brunneis lutescentibus rimosis; foliis oppositis petiolatis peltatis rigide membranaceis ovatis vel ovato-oblongis apice abrupte acuminatis basi rotundatis 10–18 cm. longis 6–12 cm. latis supra juventate minute ferrugineo-tomentellis tandem glabratis subtus indumento simili ornatis; petiolis 2.5–4.0 cm. longis ut in folio vestitis; inflorescentiis paniculatis cymosis plus minus fasciculatis; pedunculis foliis ca. dimidia aequantibus 1–9-floris dense ferrugineo-tomentellis; pedicellis 1.5–2.0 cm. longis; bracteis foliaceis anguste oblongis ca. 1 cm. longis; calycis lobis foliaceis anguste oblongis abrupte acuminatis 1.0–1.5 cm. longis sparse ferrugineo-tomentellis; corollae speciosissimae gilvae inferne brunnescentis extus omnino glabrae tubo-proprio late cylindrico 0.75–1.25 cm. longo basi ca. 0.75 cm. diametro metiente ad apicem staminigero ibique abrupte dilatato faucibus campanulatis 2.0–2.5 cm. longis ostio ca. 2 cm. diametro metiente lobis late obovato-dolabriformibus 2.5–3.0 cm. longis patulis; antheris anguste sagittatis ca. 1 cm. longis; ovariis ovoideis ca. 0.4 cm. longis glabris; stigmatibus 0.2 cm. longo; nectarium glandulis ovoideis ovariis vix aequantibus; folliculis crassiusculis 20–25 cm. longis apice connatis glabris vel minutissime papillatis; seminibus 2.25 cm. longis parte dimidia superiore rostratis como dilute aurantiaco ca. 5 cm. longo.—BRAZIL: Parana: Valhinos, ad marginem silvae primaevae, Nov. 11, 1910, *P. Dusen 10851* (*in flore*: Mo. Bot. Garden Herbarium, TYPE, Herbarium Mus. Bot. Stockholm, duplicate); Rio Grande

do Sul: Silveira Martina, prope Santa Maria, in silva primaeva, March 6, 1893, *G. A. Malme 690* (*in fructu*: Herbarium Mus. Bot. Stockholm, *COTYPE*, Mo. Bot. Garden Herbarium, photograph).

This species is apparently widely established, having been collected upon numerous occasions in the Brazilian states of Parana, Sao Paulo, and Rio Grande do Sul, by Dusen, the Regnell Exploration parties of the Botanical Museum at Stockholm, and the botanists of the Expedition der Kaiserlichen Akademie der Wissenschaften in Wien. It differs from the closely related *P. peltatus*, for which it has been mistaken, in the larger corolla, the tube of which about half equals the throat, the proportionally shorter calyx-lobes, and the fewer-flowered inflorescence. The leaves of the latter species are also relatively larger than in *P. malvaeflorus*, and a slightly more coriaceous texture predominates. At present, true *P. peltatus* is known with certainty only from the Brazilian state of Minas Geraes.

Peltastes stemmadeniiflorus Woodson, sp. nov., suffruticosa volubilis; ramis subcompressis sat crassis juventate ferrugineo-tomentulosis maturitate glabratis; foliis oppositis petiolatis peltatis rigide membranaceis late ovatis apice abrupte acuminatis basi rotundatis 18–20 cm. longis 12–15 cm. latis supra glabratis subtus glabratis vel sparse ferrugineo-tomentellis; petiolis 7–9 cm. longis ut in folio vestitis; inflorescentiis paniculatis cymosis lateralibus oppositis; pedunculis petiolis vix dimidio aequantibus dense ferrugineo-tomentulosis ca. 7-floris; pedicellis 1.5 cm. longis ut in pedunculo vestitis; bracteis foliaceis glabratis oblongo-spathulatis pedicello ca. aequantibus; calycis lobis foliaceis late oblongo-spathulatis abrupte acuminatis 1.5–2.0 cm. longis extus glabratis inferne sparse tomentellis; corollae speciosissimae ut videtur flavae extus omnino glabrae tubo proprio 2.25 cm. longo basi ca. 0.75 cm. diametro metiente faucibus gradatim dilatatis conico-campanulatis 2 cm. longis ostio ca. 1.5 cm. diametro metiente lobis late obovato-dolabriformibus acuminatis 2.0–2.5 cm. longis patulis; genitaliis ignotis; folliculis desiderantur.—PARAGUAY: in altaplanitie et declivibus, Sierra de Amambay, Dec. 1907, *T. Rojas 9838* (Herbarium Mus. Palat. Vindob., *TYPE*, Mo. Bot. Garden Herbarium, photograph).

The larger calyx-lobes, longer corolla tube-proper, and gradually dilating, conical-campanulate corolla-throat serve to distinguish *P. stemmadeniiflorus* from the neighboring *P. malvaeflorus* of southern Brazil.

Peltastes giganteus Woodson, sp. nov., suffruticosa volubilis; ramis teretiusculis sat crassis juventate ut videntur minute ferrugineo-tomentulosis maturitate certe glabratis; foliis oppositis petiolatis peltatis coriaceis late ovatis apice abrupte et brevissime caudato-acuminatis basi rotundatis 35 cm. longis 20 cm. latis supra subtusque glabratis; petiolo 12 cm. longo glabrato; inflorescentiis plus minusve fasciculatis subumbellatis 4-5-floris; pedunculo minute ferrugineo-tomentello petiolo multo brevior; pedicellis 1 cm. longis ut in pedunculo vestitis; bracteis oblongo-lanceolatis acuminatis pedicellis subaequantibus; calycis lobis foliaceis oblongis abrupte mucronulatis 1.25-1.5 cm. longis extus glabratis inferne sparsissime tomentellis; corollae speciosae ut videtur flavidulae extus omnino glabrae tubo-proprio late cylindrico 2 cm. longo basi ca. 0.5 cm. diametro metiente ad apicem staminifero ibique gradatim dilatato faucibus late tubulatis 2.5 cm. longis ostio ca. 1 cm. diametro metiente lobis late obovatis dolabriformibus 2 cm. longis patulis; antheris anguste sagittatis 1.25 cm. longis; ovariis late ovoideis 0.25 cm. longis dense ferrugineo-tomentellis; stigmatibus 0.2 cm. longo; nectariis ovoideo-dentiformibus ovariis vix aequantibus; folliculis ignotis.—BOLIVIA: exact locality and date lacking, *M. Bang 2804* (Mo. Bot. Garden Herbarium, TYPE).

At present the only species of *Peltastes* with a tubular corolla-throat by which it may readily be distinguished as well as by means of the unusually large leaves.

Peltastes colombianus Woodson, sp. nov., suffruticosa volubilis; ramis teretibus crassiusculis juventate minute ferrugineo-puberulis mox glabratis; foliis oppositis longe petiolatis peltatis rigide membranaceis ovatis vel late ovalibus apice abrupte brevissimeque caudato-acuminatis basi rotundatis 18-25 cm. longis 15-20 cm. latis supra minutissime papillatis in umbilico plus minusve ferrugineo-tomentulosis subtus glabris; petiolis 8-10 cm.

longis, juventate minute ferrugineo-tomentellis tandem glabratis; inflorescentiis paniculatis cymosis; pedunculis petiolo paulo brevioribus 10–15-floris minute ferrugineo-tomentellis; pedicellis 1.5–2.0 cm. longis; bracteis oblongo-spathulatis petiolo paulo brevioribus; calycis laciniis late oblongo-spathulatis breviter acuminatis 2.5–3.0 cm. longis basi sparse tomentellis superne glabratis intus multiglandulosis; corollae magnae extus glabrae tubo-proprio latiuscule cylindrico 2.5–2.75 cm. longo basi ca. 0.4 cm. diametro metiente faucibus gradatim dilatatis conicis 1.5 cm. longis ostio ca. 1.5 cm. diametro metiente lobis obovato-orbiculatis ca. 1 cm. longis patulis; antheris anguste sagittatis 1.25 cm. longis; ovariis ovoideis ca. 0.2 cm. longis minute ferrugineo-tomentellis; nectariis ovoideo-dentiformibus ovariis paulo brevioribus; folliculis ignotis.—COLOMBIA: vicinity of Santa Marta, alt. 2000 ft., June, 1899, *H. H. Smith 2412* (Mo. Bot. Garden Herbarium, TYPE).

Approaches *P. macrocalyx*, but differs conspicuously in its much larger, nearly glabrous foliage, its broader calyx-lobes, and its gradually dilating, conical corolla-throat. The latter species, moreover, is apparently confined to southeastern Brazil.

Of the six species referred to the genus *Peltastes* in the paragraphs immediately preceding, *P. peltatus* and *P. macrocalyx* were recognized by Mueller-Argoviensis as belonging to the inclusive genus *Echites*, although he noted in them certain characters in common with his monotypic genus *Stipecoma*, such as the peltate leaves and rostrate seeds. Miers, in 1878, was quick to take advantage of Mueller's observations, and transferred the species mentioned unequivocally to *Stipecoma*.

Although sharing with *Stipecoma* such conspicuous features as peltate leaves, rostrate seeds, and a somewhat similar geographical distribution, *Peltastes* differs in its opposite, lateral inflorescences, infundibuliform corolla, foliaceous bracts and calyx-lobes, exceedingly numerous and indefinitely distributed squamellae, and more robust vegetative habit. The distinction in vegetative habit is further accentuated in a very tangible way by the possession of a conspicuous, ferruginous indument by the six known species of *Peltastes*, since the single species of *Stipecoma* is glabrous in all parts.

Peltastes differs from *Echites* P. Br. in its opposite, lateral inflorescences, infundibuliform corolla, indefinitely distributed squamellae, and peltate leaves. Technical details of the reproductive organs also differ.

Fernaldia brachypharynx Woodson, sp. nov., suffruticosa volubilis; ramis teretibus minute puberulis tandem glabratis; foliis oppositis longiuscule petiolatis membranaceis late ovatis apice subiter acuminatis basi rotundatis 7–10 cm. longis 5–7 cm. latis supra sparse minutissimeque pilosulo-papillatis subtus pallidioribus minute sparseque puberulis; petiolis 1.5–2.0 cm. longis sparse pilosulis; inflorescentiis pseudo-racemosis multifloris; pedunculo minute puberulo petiolo paulo superante; pedicellis prope apicem pedunculi congestis ca. 0.5 cm. longis post maturitatem paulo accrescentibus; bracteis minute ovato-lanceolatis scariaceis 0.1–0.2 cm. longis; calycis laciniis ovatis acuminatis 0.2–0.3 cm. longis extus sparse pilosulis intus basi squama deltoidea margine minute crenulata instructis; corollae speciosae ut videtur albae extus in alabastro omnino pilosulae tubo-proprio latiuscule cylindrico 1.75–2.0 cm. longo basi ca. 0.3 cm. diametro metiente faucibus anguste conicis 1.5–1.75 cm. longis ostio ca. 0.75 cm. diametro metiente lobis oblique obovatis acuminatis ca. 1.25 cm. longis patulis; antheris oblongo-sagittatis basi obtuse auriculatis 0.6 cm. longis; ovariis oblongoideis ca. 0.15 cm. longis glabris; stigmatibus fusiformi apice longe-apiculato ca. 0.2 cm. longo; nectario ut in *F. pandurata* lobato ovariis ca. dimidio aequante; folliculis desiderantur.—GUATEMALA: along the road from Escuintla to the port of San José de Guatemala, Aug. 23, 1860, S. Hayes s. n. (Gray Herb., TYPE, Mo. Bot. Garden Herbarium, photograph and analytical drawings).

This striking species may easily be distinguished from *F. pandurata* (A. DC.) Woodson by means of its narrowly conical corolla-throat which about equals in length the broadly cylindrical proper-tube, contrasting sharply with the broadly campanulate throat and much longer, narrower proper-tube of the latter species. The flower-buds of *F. brachypharynx*, moreover, are generally pilosulose without, while those of *F. pandurata* are merely somewhat ciliolate at the tip.

Thenardia tubulifera Woodson, sp. nov., suffruticosa volubilis; ramulis teretibus tenuibus glabris; foliis oppositis breviter petiolatis membranaceis elliptico-lanceolatis apice subcaudato-acuminatis basi obtusis 4–7 cm. longis 1.5–2.5 cm. latis supra glabris subtus in nervo medio venisque laxe pilosulis; petiolis 0.5–1.0 cm. longis minutissime puberulis; inflorescentiis subumbellato-corymbosis pedunculo 2.5–3.0 cm. longo ad apicem trichotomo ramulis 0.5–0.75 cm. longis; pedicellis prope apices ramulorum congestis ca. 2.5 cm. longis post maturitatem paulo accrescentibus glabris; bracteis lanceolatis minutis; calycis laciniis ovatis acutis 0.2 cm. longis extus glabris intus squama deltiforma subintegra ca. 0.75 cm. longa instructis; corollae salverformis haud rotatae tubo late cylindrico prope medium paulo constricto 0.5–0.6 cm. longo basi ca. 0.2 cm. diametro metiente; lobis obovato-orbicularibus breviter oblique apiculatis 0.75 cm. longis patulis; antheris anguste sagittatis 0.7–0.8 cm. longis omnino exsertis; ovariis ovoideis 0.15 cm. longis glabris; stigmatibus fusiforme apice breviter bipartito ca. 0.125 cm. longo; nectariis late ovoideis integris ovariis vix aequantibus; folliculis ignotis.—MEXICO: Jalisco: exact locality and date lacking, *L. Diquet s. n.* (N. Y. Bot. Garden Herbarium, TYPE, Mo. Bot. Garden Herbarium, photograph and analytical drawings).

Of the general aspect of *Th. floribunda* HBK., but differing from the other known species of the genus in the development of a conspicuous corolla-tube. *Th. tubulifera* may be distinguished from the latter species also in the pubescence of the lower surface of the leaves which occurs generally along the midrib and veins and not merely in small patches in the axils of the midrib.

Echites turrigera Woodson, sp. nov., suffruticosa volubilis; ramulis teretibus gracilibus juventate minute sparseque pilosulis mox glabratis; foliis oppositis longiuscule petiolatis rigidiuscule membranaceis ovato-oblongis apice acuminatis basi obtusis plerisque 3.5–5.0 cm. longis 2.25–3.0 cm. latis maturitate omnino glabris dilute viridibus opacis; petiolis 0.75–1.0 cm. longis; inflorescentiis cymosis lateralibus alternatis 14–20-floris; pedunculo foliis subaequante sparse pilosulo; pedicellis 1.0 cm. longis post maturitatem paulo accrescentibus ut in pedunculo vestitis;

bracteis linearibus 0.2–0.5 cm. longis scariaceis vel parum subfoliaceis; calycis laciniis anguste lanceolatis acuminatis 0.75 cm. longis subfoliaceis extus glabriusculis intus basi squamellas 4–6 dentiformes gerentibus; corollae salverformis colore dilute flavo-viridis tubo gracillimo 2.75 cm. longo basi cylindrico ca. 0.2 cm. diametro metiente paulo infra medium conspicue dilatato ibique staminifero deinde faucem versus sensim attenuato lobis oblique obovatis acuminatis 0.75 cm. longis patulis; antheris anguste sagittatis basi acutissime auriculatis 0.75 cm. longis; ovariis oblongoideis 0.3 cm. longis glabris; nectariis ovoideis compressis ovariis dimidio aequantibus; folliculis ignotis.—GUATEMALA: Gualan, alt. 620 ft., June 20, 1909. *C. C. Deam 6376* (Mo. Bot. Garden Herbarium, TYPE).

The nearest ally of the foregoing is apparently *E. yucatanensis* Millsp., from which it differs in the larger, paler leaves which are not pandurate, the longer, subfoliaceous calyx-lobes, and the more floriferous, more perfectly cymose inflorescence. The specific adjective is in fanciful allusion to the clustered, spire-like floral buds.

Galactophora magna Woodson, sp. nov., suffrutescens omnino glabra; caulibus erectis teretibus sat crassis altitudine ignotis; foliis oppositis sessilibus coriaceis late ovato-cordatis apice obtusis basi amplexicaulibus 4.5–5.0 cm. longis 3.0–3.5 cm. latis subtus pallidis margine in sicco subrevolutis; inflorescentiis terminalibus ca. trifloris; pedunculo quam folio multo brevioribus; pedicellis 1 cm. longis; bracteis minutis vix bene visis; calycis laciniis ovato-lanceolatis acuminatis 2.0–2.5 cm. longis 0.75–1.0 cm. latis scariaceis vel parum petaloideis extus glabris intus basi squamellas minimas extra-axillares gerentibus; corollae speciosissimae infundibuliformis (colore aut roseae aut dilute flavidulae?) tubo proprio breviuscule cylindrico 2.0–2.25 cm. longo basi ca. 0.4 cm. diametro metiente ad apicem staminifero ibique dilatato faucibus late campanulatis 3 cm. longis ca. 2.5 cm. diametro metiente lobis late ovatis breviter acuminatis 4.5 cm. longis patulis patentibusve; antheris anguste lanceolatis 0.8 cm. longis basi acute biauriculatis dorso glabriusculis; nectario cupuliformi plus minusve crenulato ca. 0.1 cm. alto ovariis oblongoideis gla-

bris ca. $\frac{1}{3}$ aequante; folliculis ignotis.—BRAZIL: Procedencia Juruena, "campo humido e pantuoso," April, 1909. *F. C. Hoehne 1759* (U. S. National Herbarium, TYPE, Mo. Bot. Garden Herbarium, photograph and analytical drawings).

This species is probably the most striking of the genus *Galactophora* known at present. Like *G. calycina* (Hub.) Woodson, it is without the peculiar aculeolate glands which characterize the exterior of the corolla, calyx, and stems of the other species, but it differs from the latter in the large, ovate leaves, and particularly in the much larger corolla with showy, spreading lobes.

Temnadenia ornata (Hoehne) Woodson, comb. nov.

Echites ornata Hoehne, Comm. Linh. Electr. Estrat. Matto Grosso, Anexo 5, Bot. 6: 82. pls. 120, 131, fig. 1. 1915.

The genus *Temnadenia*, as established by Miers, Apoc. So. Am. 207, 1878, is an extremely unnatural conglomeration of twenty-two species of widely separate affinities. Of those originally transferred to the genus, one species is more correctly included within the genus *Tabernaemontana* L., one within *Dipladenia* A. DC., eight within *Mandevilla* Lindl., and eight within *Prestonia* R. Br. The remaining four constitute a fairly natural entity to which Miers's generic name must be applied. *Temnadenia*, as thus restricted, is found to be a genus very closely related to *Echites* P. Br., differing chiefly in its di- or trichotomous, indeterminate inflorescence and structural details of the reproductive organs. The flowers of *Echites* are always pale greenish-yellow, while those of *Temnadenia* are a rich cream suffused with pink, or in one species, *T. violacea* (Vell.) Miers, a nearly uniform, rich crimson gradually paling toward the base of the corolla-tube. The geographical distribution of the two genera also differs, that of the former being limited to the Greater Antilles, the Bahama Islands, southern Florida, Yucatan, and Guatemala, and that of the latter to southern Brazil.

Mandevilla sertuligera Woodson, sp. nov., suffruticosa volubilis; ramulis gracillimis teretibus juventate minute hispidulis puberulisve tandem glabratis maturitate rubidulis parum rimosis; foliis oppositis petiolatis membranaceis elliptico-ovatis acumi-

natis obscure cordatis plerisque 6–8 cm. longis 3.0–3.5 cm. latis supra hispidulo-strigillosis subtus dense lanato-tomentulosis; petiolis 0.75–1.25 cm. longis ut in ramulis vestitis; squamis stipulaceis haud visis; inflorescentiis racemosis corymbosis lateralibus alternatis vel subterminalibus multifloris; pedunculo foliis ca. dimidio brevioris hispidulo; pedicellis congestis subsecundis 0.3–0.4 cm. longis post maturitatem paulo accrescentibus; bracteis linearibus pedicellis subaequantibus scariaceis; calycis lobis anguste lanceolatis longe acuminatis subsetaceis 0.4–0.6 cm. longis scariaceis extus pilosulis intus basi squamellas multas denticuliformes uniforme gerentibus; corollae tubiformis dilute flavidulae tubo cylindrico 0.75 cm. longo basi ca. 0.2 cm. diametro metiente infra medium staminifero faucibus paulo ampliatis lobis late ovatis acutiusculis erectis 0.3–0.4 cm. longis; antheris anguste oblongis 0.4 cm. longis basi obscure auriculatis; ovariis ovoideis minute puberulo-papillatis in stylo abrupte contractis 0.15 cm. longis; nectarii glandulis oblongo-ovoideis basi connatis ovariis paulo superantibus; folliculis ignotis.—MEXICO: Michoacan: rocky hills near Coru Station, alt. 6000 ft., Jan. 23, 1907. *C. G. Pringle 13890* (U. S. National Herbarium, TYPE, Mo. Bot. Garden Herbarium, photograph and analytical drawings).

Most closely related to *M. Syrinx* Woodson, from which it differs in its shortly pedunculate, corymbose inflorescence and extremely long-attenuate or subsetaceous calyx-lobes which are nearly twice as long as in the latter species. In addition to the type specimen, the species is represented in several of the leading herbaria of America and Europe by two other collections by Pringle in the Mexican states of Michoacan and Morelos.

Mandevilla rugosa (Benth.) Woodson, comb. nov.

Echites rugosa Benth. in Hook. Journ. Bot. 3: 249. 1841.

Amblyanthera versicolor (Stadelm.) Muell.-Arg. β . *intermedia*

Muell.-Arg. in Mart. Fl. Bras. 6¹: 146. 1860, in part.

Mitozus rugosus (Benth.) Miers, Apoc. So. Am. 222. 1878.

This member of the puzzling *mollissima-scabra* complex differs from the latter species chiefly in the coriaceous or subcoriaceous, strikingly rugose foliage.

Mandevilla rutila Woodson, sp. nov., suffruticosa volubilis; ramulis gracillimis juventate ferrugineo-pilosulis tandem glab-ratis; foliis oppositis breviter petiolatis membranaceis late ellipti-cis acuminatis obscure auriculatis 8–15 cm. longis 3–5 cm. latis supra minute ferrugineo-pilosulis nervo medio parce glanduligeris subtus dilute ferrugineo-pilosulis; petiolis 0.5–1.0 cm. longis sparse pilosulis; squamis stipulaceis obsoletis vel minus mani-festis; racemis simplicibus lateralibus alternatis pedunculo foliis saepissime aequale multifloro; pedicellis 0.3–0.5 cm. longis matu-ritate parum accrescentibus; bracteis linearibus filiformibusve ca. 1 cm. longis scariaceis; calycis laciniis ovato-lanceolatis longe-acuminatis 0.2–0.4 cm. longis scariaceis basi intus squamellam deltatam oppositam gerentibus; corollae infundibuliformis fulvo-aurantiaca extus sparse pilosulae tubo-proprio anguste cylin-drico superne parum gibboso 1.75–2.25 cm. longo basi ca. 0.15 cm. diametro metiente faucibus conicis 1.0–1.5 cm. longis ostio ca. 0.75–1.0 cm. diametro metiente lobis oblique obovatis acuminatis 1.25–1.75 cm. longis patulis; antheris anguste ellipticis obscure auriculatis 0.4 cm. longis; ovariis ovoideis in stylo gracili gradatim productis 0.15 cm. longis glabris; stigmatibus 0.2 cm. longo breviter apiculato; nectariis 5 oblongoideis ovariis subaequantibus; folli-culis gracillimis conspicue articulatis 15–20 cm. longis glabris; seminibus 0.5 cm. longis como aurantiaco ca. 2 cm. longo.— BOLIVIA: La Paz: Mapiri, alt. 5000 ft., April, 1886. *H. H. Rusby 2385* (N. Y. Bot. Garden Herbarium, TYPE, Mo. Bot. Garden Herbarium, photograph and analytical drawings).

Most closely related to *M. scabra* (R. & S.) K. Sch., from which it may be distinguished by means of its much longer, linear to fili-form bracts, pale-ferruginous foliar indument, and longer, more attenuate calyx-lobes. At present five different collections of *M. rutila* are known, all from the province of La Paz, Bolivia. *M. scabra* is apparently confined to Venezuela, the Guianas, and northern Brazil.

Secondatia Macnabii (Urb.) Woodson, comb. nov.

Orthechites Macnabii Urb. Symb. Ant. 6: 37. 1909.

The monotypic genus *Orthechites* is distinguishable from *Secondatia* A. DC. merely by a slight constriction of the corolla-

tube at the insertion of the stamens, and by lanceolate calyxlobes. In all other essential respects, the two genera are quite conformable and surely appear to constitute a natural unity. No one as yet has proposed the establishment of a segregate genus upon the basis of the glabrous anthers of *S. peruviana* Poeppig or the lateral cymes of *S. Schlimiana* Muell.-Arg. and *S. floribunda* A. DC., and the distinguishing characteristics of *S. Macnabii* likewise appear to be merely specific, or at most sectional, in nature. Since *S. Macnabii* is apparently confined to Jamaica, the genus *Secondatia* is found to have a type of geographical distribution somewhat similar to that of *Mandevilla* Lindl. subgen. *Eumandevilla*.

***Odontadenia laxiflora* (Rusby) Woodson, comb. nov.**

Laubertia (?) *laxiflora* Rusby, Bull. N. Y. Bot. Gard. 4: 408. 1907.

A species superficially differing from others of *Odontadenia* Benth. in the somewhat smaller flowers, but evidently congeneric in all other essential particulars. The characters of *Odontadenia* must be rather liberally interpreted unless such segregate genera as *Anisolobus* A. DC. and *Perictenia* Miers are to be regarded as valid. The distinguishing characters of the little-understood genus *Laubertia* A. DC. have been briefly discussed in a previous note of this series (Ann. Mo. Bot. Gard. 18: 556. 1931).

***Mesechites minima* (Britton & Wilson) Woodson, comb. nov.**

Echites minima Britton & Wilson, Mem. Torrey Bot. Club 16: 94. 1920.

A most appropriately named species indigenous to central and southern Cuba, a range shared by its only Cuban congener, the familiar, showy-flowered *M. myrtifolia* (R. & S.) Muell.-Arg. (= *Echites rosea* A. DC.).

In restoring at this time the genus *Mesechites* Muell.-Arg. which has been in disuse since 1878, only a few words are necessary in justification. From *Echites* P. Br. (in the stricter sense as typified by *E. umbellata* Jacq.), with which it is still confused, *Mesechites* may readily be distinguished by its glandular foliage, dichotomous, bostrychoidally racemose inflorescence, obscurely

auriculate anthers, and multiglandular calyx. Although persistently confounded with *Echites*, *Mesechites* is more naturally to be associated with *Mandevilla* Lindl., from which it is quite easily separable because of its dichotomous bostrychoid inflorescence and fusiform stigma. The foliar glands of most species of *Mesechites* also are quite distinctive, usually being more or less laminate in form and clustered concentrically at the very base of the midrib, conditions never observed among species of *Mandevilla*.

Mesechites bicorniculata (Rusby) Woodson, comb. nov.

Echites bicorniculata Rusby, Descr. So. Am. Pl. 86. 1920.

Differing from the closely related *M. trifida* (Jacq.) Muell.-Arg. chiefly in the possession of a conspicuous vegetative indument.

Mesechites Sanctae-Crucis (S. Moore) Woodson, comb. nov.

Echites Sanctae-Crucis S. Moore, Trans. Linn. Soc. Bot. III. 4: 396. 1895.

Echites trifida Jacq. var. *Sanctae-Crucis* (S. Moore) Malme, Bull. Herb. Boiss. II. 4: 196. 1904.

Apparently deserving of specific rank because of its shorter corolla-lobes, exappendiculate nodes, and comparatively restricted, more southerly distribution (Paraguay, adjacent Bolivia, Argentina, and Brazil), by which it may be distinguished from *M. trifida* (Jacq.) Muell.-Arg.

Mesechites citrifolia (HBK.) Woodson, comb. nov.

Echites citrifolia HBK. Nov. Gen. 3: 216. 1818.

Echites brevipes Benth. Pl. Hartw. 216. 1849.

Mesechites brevipes (Benth.) Muell.-Arg. Linnaea 30: 454. 1860.

Mitozus brevipes (Benth.) Miers, Apoc. So. Am. 223. 1878.

A comparison of the type specimen of *E. citrifolia* (*Humboldt & Bonpland s. n.* in Hb. Mus. Hist. Nat. Paris) with that of *E. brevipes* (*Hartweg 1195* in Hb. Brit. Mus.) permits no doubt concerning the necessity of this combination. Photographs of either specimen are deposited in the herbarium of the Missouri Botanical Garden.